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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Michael Maguire

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EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT

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1771

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/053,571	Applicant(s) MAGUIRE, MICHAEL	
	Examiner Ula C. Ruddock	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25 and 29-38 is/are pending in the application.
- 4a) Of the above claim(s) 30,35 and 38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25,29,31-34,36,37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Examiner has carefully considered Applicant's response filed June 28, 2007. The rejections are maintained.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 25, 29, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haver et al. (US 4,691,744) in view of Mizugoshi (US 2,194,865). Haver et al. disclose a filter wire cloth comprising warp and weft wires forming a plurality of alternating patterns comprising at least one intermediate weft wire inserted in the weave and at least one intermediate warp wire inserted in the weave (col 1, ln 49-66). The wires are preferably metal (col 1, ln 11-12). It should be noted that the Examiner is equating the warp wires to the first plurality of filaments in a first direction. Also, the Examiner is equating the weft wires to the second plurality of filaments in a second direction. Finally, the Examiner is equating the intermediate weft wire or the intermediate warp wire of Haver to the first reinforcing filaments in the second direction of the present invention or the intermediate warp wire of Haver to the second reinforcing filaments in the first direction of the present invention. Haver et al. fail to specifically disclose incorporating both intermediate warp and intermediate weft wires.

Mizugoshi (US 2,194,865) disclose a net of square meshes wherein, an auxiliary thread for reinforcements is added to the weft (col 2, ln 4-6) and to the warp (col 2, ln 20-22). Mizugoshi specifically discloses that the auxiliary reinforcing threads may be adopted for both the weft and

warp. The threads used may comprise metallic wires (col 2, ln 47-49). It would have been obvious to one having ordinary skill in the art to have used Mizugoshi's disclosure of additional reinforcing threads being added to the weft and warp on the cloth of Haver, motivated by the desire to create a wire cloth having increased strength and durability.

Rejection is maintained.

4. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haver et al. (US 4,691,744) and Mizugoshi (US 2,194,865) as set forth above, and further in view of Caals (US 1,788,657). Haver et al. and Mizugoshi disclose the claimed invention except for the teaching that the first and second reinforcing filaments are metal wires of a heavier gauge than the metal wires of the first and second plurality of filaments.

Caals (US 1,788,657) disclose a filter cloth comprising having warp and weft threads woven into the material at the points to be reinforced (col 1, ln 24-46). As seen in Figure 1, warp and weft threads a and b are heavier threads than the warp and weft threads a' and b' (col 1, ln 32-37). The heavier warp and weft threads give zones of different strength. The strengthening bands are woven into the cloth by either warping and weaving stronger yarns at the desired places (col 1, ln 48-50 to col 2, ln 1). It would have been obvious to have used Caals' disclosure of inserted heavier warp and weft threads in the filter cloth of Haver et al. and Mizugoshi, motivated by the desire to create a filter cloth that has different zones of strength.

Rejection is maintained.

5. Claims 33, 34, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haver et al. (US 4,691,744) and Mizugoshi (US 2,194,865) as set forth above, and further in view

of Pall et al. (US 3,327,866). Haver et al. and Mizugoshi disclose the claimed invention except for the teaching that the first and second reinforcing filaments are brazed or welded to the first and second plurality of filaments.

Pall et al. disclose a woven wire mesh that is useful as a filter element and is formed of interwoven metallic filaments (col 1, ln 8-11). The mesh can be juxtaposed with the layers oriented similarly or at an angle to each other. The layers can be bonded by welding or brazing (col 5, ln 55-60 to col 6, ln 1-6). It would have been obvious to have used Pall's method of bonding via brazing or welding on the first and second plurality of filaments and first and second reinforcing filaments of Haver and Mizugoshi, motivated by the desire to create a filter that has increased lamination strength.

Rejection is maintained.

Response to Arguments

6. Applicant's arguments filed June 28, 2007, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that a prima facie case of obviousness has not been established because the teachings of Haver and Mizugoshi, either alone or in combination, fail to disclose, teach or render obvious the claimed invention. This argument is not persuasive because Mizugoshi specifically discloses metal wires that are used as the auxiliary reinforcing threads in both the weft and warp direction. Therefore, in combination, the Haver and Mizugoshi references disclose first and second plurality of filaments in a first and second direction and one or more reinforcing filaments in both the first and second direction. As a result, the rejections are maintained.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/U. C. R./

/Ula C Ruddock/
Primary Examiner, Art Unit 1771